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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,693	07/28/2003	Jae-Yoon Sim	SEC.999	3208
20987	7590	09/30/2005		
VOLENTINE FRANCOS, & WHITT PLLC ONE FREEDOM SQUARE 11951 FREEDOM DRIVE SUITE 1260 RESTON, VA 20190			EXAMINER WELLS, KENNETH B	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/627,693

**Applicant(s)**

SIM ET AL.

**Examiner**

Kenneth B. Wells

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 19-23 is/are rejected.
- 7) ☒ Claim(s) 11-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Applicant's response filed on 8/16/05 has been received and entered in the case.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claim 21 is rejected based on either Namiki et al or Misawa et al.

See paragraph 3 of the previous office action for the details of this rejection.

4. Claims 1-7, 19, 20 and 23 are rejected based on either Namiki et al or Misawa et al in view of any one of Raad, Muyshondt et al, Forehand et al, Hayama and Southard.

See paragraph 4 of the previous office action for the details of this rejection.

5. Claim 22 is rejected based on either Namiki et al or Misawa et al in view of well-known prior art.

See paragraph 5 of the previous office action for the details of this rejection.

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6. Claims 11-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Applicant's arguments filed on 8/16/05 have been fully considered but they are not persuasive.

The first argument that no adequate grounds of rejection were presented for claims 8-10 is not persuasive. This argument is not persuasive because in the 9/30/04 office action the examiner clearly indicated that the limitations of claims 2-23 are all old and well-known in the art. Moreover, in the 5/18/05 office action it was stated that claims 8-10 are unpatentable for the same reason noted previously. Therefore, it is clear that the limitations of claims 2-23 are all obvious in view of well-known prior art. Applicant's further argument regarding one of the references being dropped (i.e., Chevellier) is also insufficient for overcoming the grounds of rejection. The basis for the rejection of claims 8-10 was clearly provided in the previous office actions.

The next argument, regarding the non-inverting terminal of element 224 in Misawa is also not persuasive.

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The argument that this terminal has a fixed impedance is not persuasive because it is incorrect, i.e., it appears that the applicant has misinterpreted which terminal of comparator 224 is the non-inverting terminal.

The further argument that the operational recitations in the claim are not present in Misawa is also not persuasive because, as one of ordinary skill in the art will easily recognize, the recited operation is clearly inherent therein. It is further noted that applicant's citation of case law (i.e., Zurko) is not on point, because the examiner has not relied upon official notice "as the principal evidence upon which [the] rejection was based", i.e., the Zurko test is not relevant in the instant rejection.

The further arguments based on the Namiki reference are similarly not persuasive. For example, the argument that the current in Namiki which flows through the serially connected resistors 19n remains unchanged and does not vary is also incorrect, i.e., during operation of the Fig. 4 circuitry the current will of course change.

The further argument, that the office action does not mention bypassing of the n resistors, is also not persuasive, i.e., this is clearly present in the operation

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of the variable voltage dividers of each of the secondary references.

The final argument, that there is no suggestion in Misawa or Namiki for making the proposed modifications set forth in the office action is also not persuasive (because the motivation is clearly present in each of the secondary references, and does not need to be present in the primary references, as applicant is well aware).

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the

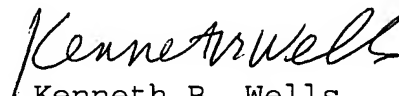
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statutory period for reply expire later than SIX MONTHS  
from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B. Wells whose telephone number is (571)272-1757. The examiner can normally be reached on Monday through Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan, can be reached at (571)272-1740. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kenneth B. Wells  
Primary Examiner  
Art Unit 2816

September 29, 2005